

WHAT IS CLAIMED IS:

1. A polishing composition comprising an abrasive, water and an organic acid or a salt thereof, wherein the composition has a specified viscosity of from 1.0 to 2.0 mPa•s at a shearing rate of 1500 s⁻¹ and 25°C.

2. The polishing composition according to claim 1, further comprising a viscosity-reducing agent.

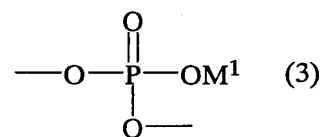
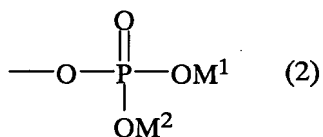
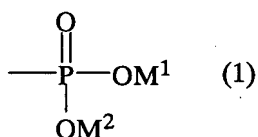
3. A roll-off reducing agent comprising a Brönsted acid or a salt thereof, having an action of lowering viscosity so that an amount of viscosity lowered is 0.01 mPa•s or more, wherein the amount of viscosity lowered is expressed by the following equation:

$$\text{(Amount of Viscosity Lowered)} = \text{(Viscosity of Standard Polishing Composition)} - \text{(Viscosity of Roll-Off Reducing Agent-Containing Polishing Composition)},$$

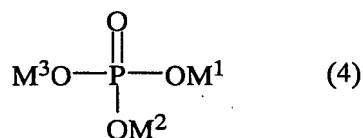
wherein the standard polishing composition is prepared which comprises 20 parts by weight of an abrasive, said abrasive being high-purity alumina having Al₂O₃ purity of 98.0% by weight or more composed of α-type co-random crystal, 1 part by weight of citric acid, and 79 parts by weight of water; the roll-off reducing agent-containing polishing composition is prepared which comprises 20 parts by weight of an abrasive, said abrasive being high-purity alumina having Al₂O₃ purity of 98.0% by weight or more composed of α-type co-random crystal, 1 part by weight of citric acid, 78.9 parts by weight of water and 0.1 parts by weight of a roll-off reducing agent; and the viscosity is a viscosity at a shearing rate of

1500 s⁻¹ and 25°C.

4. The roll-off reducing agent according to claim 3, wherein the roll-off
reducing agent is a compound having one or more functional groups represented
5 by the formulas 1 to 3:



- wherein each of M¹ and M², which may be identical or different, hydrogen atom,
a metal atom, ammonium, or an organic ammonium; or
10 a compound represented by the formula 4:



wherein M¹ and M² are as defined above; M³ is hydrogen atom, a metal atom,
ammonium, or an organic ammonium.

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5. A polishing composition comprising the roll-off reducing agent as defined
in claim 3 or 4, an abrasive and water.

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6. The polishing composition according to claim 5, further comprising an
organic acid or a salt thereof.

7. A process for producing a substrate comprising a step of polishing a substrate to be polished with the polishing composition of claim 1 or 2.

5 8. A process for producing a substrate comprising a step of polishing a substrate to be polished with the polishing composition of claim 5.

9. The process according to claim 7, wherein the substrate to be polished is a magnetic disk substrate.

10 10. The process according to claim 8, wherein the substrate to be polished is a magnetic disk substrate.

11. A process of reducing roll-off of a substrate, comprising applying to a substrate to be polished the polishing composition as defined in claim 1 or 2 in
15 the polishing step.

12. A process of reducing roll-off of a substrate, comprising applying to a substrate to be polished the polishing composition as defined in claim 5 in the polishing step.